Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
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	)	
Telecommunications Relay Services	)	CG Docket No. 03-123
and	)	
Speech-to-Speech Services for	)	
Individuals with Hearing and Speech	)	
Disabilities	)	

Access to Emergency Services

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Comments of Communication Access Center for the Deaf and Hard of Hearing on the Notice for Proposed Rule Making

Communication Access Center for the Deaf and Hard of Hearing (CACDHH) hereby respectfully submits these comments to the Federal Communications Commission (FCC or Commission) on the notice of proposed rulemaking (NPRM) regarding access to emergency services for Internet-based forms of Telecommunication Relay Service (TRS), namely Video Relay Service (VRS) and Internet Protocol (IP) Relay. This NPRM defines the issue clearly and provides historical details on Emergency Calls Handling procedures and seeks comments on several possible methods of providing emergency services to users of VRS and IP relay.

CACDHH is not only a VRS Provider, but also provides a wide range of services and programs to the deaf community outside of relay services and has for the past 30 years. CACDHH is therefore providing comments from the perspective of a VRS provider and as a provider of other services to the deaf community.

Emergency services have not been available to VRS and IP users because VRS and IP providers can not identify the caller's physical location or address. This prevents the provider from identifying the correct PSAP and connecting the caller to that PSAP. The Commission is seeking comments on possible methods to correct this situation.

The Commission has implemented emergency call handling procedures for providers of Internet based voice telephone calls (VOIP). The Commission is also seeking comments about applying similar rules to VRS and IP relay providers.

Overview

E911 service which provides emergency call handling over the PSTN is based on capabilities built into the network; namely Automatic Number Identification (ANI) and Automatic Location Information (ALI). This capability was incorporated into the PSTN and that capability was used to create the current E911 service. E911 service was not created first and then the network adapted to support that service.

E911 functions correctly because each telephone location was identified (registered) as part of the service establishment procedure and identified by physical address. It was also assigned a unique permanent number (10 digit telephone number) for billing purposes. This service initiation process was performed by a single local service provider who must install lines and or equipment at that address.

That unique telephone number is identified at the start of every outbound telephone call. It is that unique number that is used to identify a physical location when emergency services are required. The caller (user) needs to do nothing extra to have this 911 capability. They do not even need to know where they are. Their particular physical location has already been identified because the unique numerical identifier was assigned at the time service was established.

VRS and IP Relay calls are initiated over the Internet, not the PSTN. However, most of the activities and functionality that are part of the PSTN are present with Internet service. A user establishes an account with a single service provider. That service provider collects information including a physical address from that user at the time of service establishment. For high speed internet service, which is a required for VRS users, the service provider must install lines or equipment at that physical address.

The one major difference is that in most cases, the service provider does not assign a permanent unique numerical identifier to each physical address or location of

service. Typically a unique numerical identifier is assigned each time the user accesses the Internet, but it is a different number for each access. It is this non-static assignment of a unique numerical identifier (in this case an IP address) that eliminates the possibility of providing emergency services in a similar manner to that which is available to users of the PSTN.

It would seem to be the most logical solution to have the Internet Service Providers assign a permanent unique numerical identifier every time that new service is established at a physical address. If the Internet had that one capability, just like the PSTN, then there would be no need for a user registration process or any other manual means to identify a user's location. In the case of some IP Relay users who have dial-up Internet service, they already have a telephone number that is known to be at a particular physical address. The Internet Service Provider would only need to relate the internet service unique identifier to that physical address to accomplish the same thing.

CACDHH is of the opinion that mandatory user registration is not an effective solution to accommodate emergency call handling. In fact it would seem that it could create more problems than it is intended to solve. What would be an effective solution is to closely match what is in place in the PSTN. That is requiring the network service provider to assign a unique numerical identify for each new subscriber and relate that number to a physical address. It should be noted that when 911 services were first created it did not cover every telephone area

immediately and not all telephone service providers were able to implement the service in a short time frame. But it was the best long term solution.

It is also important to remember that E911 service was created because of existing capabilities (ANI and ALI) built into the network. It was not created and then the providers were asked to make changes to accommodate the service.

In the scope of Internet business community, VRS and IP Relay providers are a very small part of that industry. On the other hand, the internet services providers make up the largest portion of the industry. It would seem inappropriate to mandate that the smallest segment of the industry implement new rules and procedures at some high cost to make up for the lack of capability of the largest portion of the industry. This is especially true considering that these new procedures and rules do not completely address the need. This is even more true when it appears that a relatively minor change (all new clients get a static IP address) in the practices of ISPs would solve the problem long term.

Comments

The Commission mandated a User Registration process for VOIP providers. This takes place at the initiation of service from the provider. VOIP users initiate service with a single provider. This differs from VRS and IP Relay users in two important ways. VRS and IP Relay users do not need to establish service with any

provider before placing VRS and IP calls. VRS and IP Relay users are not limited to using the services of one provider.

Emergency call handling procedures function correctly when calls are made over the PSTN because the location of every telephone number is registered or known, not because every user is registered. It would therefore seem ineffective to only register VRS and IP Relay users even if they designate a primary calling location. Emergency call handling would not work seamlessly until every possible call originating location has been registered. In the meantime, mandatory registration might give users a false sense of security thinking that they could initiate an emergency call from any location because they had completed the registration process for a single location.

First time VRS and IP Relay users would be required to register before attempting to place any calls. VRS and IP Relay providers would have to develop some procedures to insure that they do not accept any calls from users who have not yet registered. This does not match the functionality of the PSTN where no additional registration process is required of any user before they can place a call in general or an emergency call in particular.

CACDHH does not believe that utilizing VRS and IP Relay equipment serial numbers to identify a caller's Registered Location would be an effective solution. In the PSTN, it is not the telephone instrument manufacturer who is required to facilitate location identification. Using equipment serial numbers does not identify

a particular location either. Although it would seem difficult to move most VRS equipment, it is possible that users can move their VRS and IP equipment at will and not affect their Internet service. That move can be permanent and or temporary. The potential to move equipment eliminates the benefit of pre-registering the user's primary calling location. There would be an additional burden placed on the users and the VRS and IP providers. It would now be the user's responsibility to notify providers if they have changed locations. The provider must now have a method of verifying that a user has not changed locations without properly notifying the provider.

The commission has stated that they require VOIP users to register their primary calling location and therefore requiring VRS and IP user to register a primary calling location is similar. However, this is not the same because VOIP users register at the time their service is established. VRS and IP users do not establish service with VRS and IP Providers. This would then be a second registration process and therefore is not functionally equivalent. It should also be noted that the practice of creating a user profile with VRS and IP providers has fallen out of favor with users. User concerns of anonymity seem to take precedence over convenience.

In regards to privacy considerations, asking users to provide their Primary Calling Location to one or more VRS providers even for the purpose of facilitating emergency calls does ask the user to provide additional personal information that is not required in the voice telephone world. Should the Commission adopt a user

registration process, it would also require strictly applied and verified rules covering the scope of information to be collected and then limiting the use of that information. Primary Calling Location information should be limited to only that detail as is necessary to accomplish emergency call handling. The use of that information should be limited to the placement of emergency calls and should be prohibited for any other purpose.

The current TRS confidentiality rules primarily govern the content of conversations. It would seem appropriate for the Commission to adopt new rules to insure the confidentiality of the personal information required in this registration process. A registration process would require personal information to be provided primarily over the Internet. This does raise concerns about the privacy of that information. It would seem appropriate to require some type of secure system to address user's concerns.

This NPRM has indicated that VRS equipment tends to remain at the same location. While this would appear to be true at the moment, this is changing. As technology improves there will be more portable video devices. While the current equipment may in fact remain at the same location, users do place VRS and IP Relay calls from multiple locations. Most hotels now have access to high speed Internet services and there are numerous WIFI hot spots available. Any VRS and IP Relay user with a laptop and Web camera can now make VRS and IP Relay calls from numerous locations in addition to their registered primary location. Although

the Commission primarily addressed this concern to IP providers, it also is an issue for VRS providers.

The Commission suggested that users be required to affirmatively acknowledge that they are not at their Registered Location. Requiring VRS and IP Relay users to identify their calling location at the start of every call would also seem to be impractical. These proposed new rules cover emergency call handling and as such we can assume that some of these calls will be of such an emergency nature that a caller may not be able to communicate effectively and would not be able to tell anyone if they were at their primary location.

The Commission seeks comment on requirements to notify users of the limitations of placing 911 via VRS and IP Relay. It also asked about requiring VRS and IP Relay providers to supply warning labels for VRS and IP Relay equipment. The Commission asked about requiring providers to keep additional records of affirmative acknowledgment by potential users of these limitations. TRS funding might even be contingent on compliance with all these new rules.

CACDHH sees this as a dramatic demonstration of the shortcomings of a mandatory User Registration system. This registration process is so limited in its ability to effectively address all the aspects of VRS and IP Relay emergency call handling that additional, cumbersome rules must also be established. Compliance with those new rules must be monitored simply to address all those potential

situations not effectively covered by the registration system. It would seem to be a further indication of the problematic nature of these new rules that in order to insure compliance the Commission is considering basing fund reimbursement on provider compliance.

The Commission implemented certain rules for VOIP providers and restricted their ability to route calls to ten digit PSAP telephone numbers. CACDHH believes that there is a difference between VOIP providers 'routing' E911 calls to a ten digit number and a CA placing or dialing a call to a ten digit number. VRS and IP Relay providers must contact a PSAP by a voice telephone call and as such have no other way to reach the correct PSAP without dialing the appropriate ten digit number. Therefore, we believe that this portion of the VOIP rules should not be implemented for VRS and IP Relay providers.

The Commission asks if an outbound VRS or IP Relay call could also include a VOIP call so that the correct PSAP would be contacted through the VOIP call. This would seem to require every VRS and IP Relay user to subscribe to VOIP service as well. It would be difficult to explain to a deaf or hard of hearing user why they needed to subscribe to and pay for an additional voice oriented service. It might also be technically difficult to tie together at the user end the VRS or IP Relay call and the VOIP call. At the least, it would require modification of the user's CPE.

The Commission seeks comment on the necessity of a national PSAP data base that would be accessed by VRS and IP providers. It also asked if its current rules governing existing PSAP data bases would be sufficient for this new application. CACDHH believes that the current PSAP database structure is sufficient and no changes need be made. The current database rules adequately handle the PSTN E911 call processing. The portion of the VRS and IP Relay emergency call handling procedures that would access a PSAP database is no different that any other type of provider who uses it today. Therefore the current system and rules should be sufficient for VRS and IP Relay providers.

The PSTN addressed priority access by implementing a universal dial access code of 911. To maintain functional equivalency it would be appropriate to ultimately establish some Internet access for VRS and IP users that designates the call as an emergency call. The PSTN has established one dial access number. The equivalent VRS and IP would be one DNS or IP address that initiates the emergency call process. It would be appropriate to establish this same type of access for VRS and IP users at some point. However, establishing this single access address now would create a host of issues that would need to be dealt with before the successful implementation of that single access address.

The current state of VRS and IP Relay business is that users can choose to use one of several providers. If there is a single access address this then introduces the concept of how to route those emergency Internet calls and to whom. The PSTN 911

call process routes all emergency calls to an established 911 center that serves a given area or community. This is currently not possible with VRS and IP Relay. VRS and IP Relay calls to this single number (address) would require some type of routing to send the calls to an answering point. Although this should be part of emergency call handling at some point this routing function is not in place today. Therefore it seem appropriate to allow each provider to accept emergency calls at their own special address at this time. Prior to the implementation of 911, each emergency service and each location had it's own telephone number. Having a different number/address for each provider at this stage of development would be no different.

In the interest of user safety it would seem appropriate to place VRS and IP Relay 911 calls to those providers who can demonstrate the capability to process those calls. That capability starts with the ability to recognize a call as an emergency call and answer that call first or place it at the front of the queue.

Because of the emergency nature of 911 calls it is important that many other issues be addressed before providers are allowed to answer and process emergency calls. These additional concerns cover the entire call handling process and the qualifications and training of the CAs. If the Commission is going to implement rules for emergency call handling, then there should be some provider standards adopted for the processing of those calls.

The Commission asks if users should be required to register with every single provider. This is not functionally equivalent with the voice telephone users. This would be similar to asking every voice telephone user to register with every single provider of voice telephone services before they would be allowed to make emergency telephone calls.

An alternative would be a single registration system that serves all providers and all providers would have access to that registration system. This raises new questions about the cost, the creation, the maintenance and the provider access of that registration system. However, even a single user registration system accessible by all providers still only registers some users not all possible call origination locations.

It would seem that using a user registration process to allocate some costs to the state would at the least be confusing. Especially if that state allocation was only for emergency calls. The user Registration process is only intended to register a user's Primary Calling Location. Adopting the registered location as the determining factor for which state was responsible for that particular call would mean that a given state would be paying for some calls that did not originate in that state. It would seem to be difficult to force a state to pay for some calls that otherwise (in the case of TRS calls) it would not pay for. User registration does not identify the originating location of each call but only the user's primary calling location.

The ability to process E911 over the PSTN does have a cost. That cost has been determined and is passed on to all PSTN users by means of a 911 surcharge on local telephone bills. If 911 services have been mandated for VOIP providers and are to be mandated for VRS and IP Relay, it would seem appropriate that the costs incurred could also be recovered by a similar kind of surcharge. These calls are carried over the Internet and therefore that surcharge should be leveled against Internet users. So far the Internet industry has resisted attempts to initiate a surcharge mechanism for any reason. However, CACDHH believes that there is no other reasonable method available that would assign the cost recovery to those who benefit from that service being available. All PSTN users share in the cost of E911 even if they never use it themselves.

The Commission has asked for comments on the time it may reasonably take for providers to implement the proposed solutions. This is a difficult question to definitively answer because there are several variables to the proposed new rules. Should a shared User Registration database be implemented, then individual providers would not each need to do all the work themselves. CACDHH is a small non-profit organization with limited resources and a limited technical staff. It would therefore be difficult to estimate the time it would reasonably take to implement all the requirements of a user registration system. Should the Commission mandate a user registration requirement, we will comply with that mandate in the time allotted.

Summary

The relay system was created for deaf and hard of hearing people because they did not have full access to the voice telephone network. Functional equivalency was mandated as part of Section 225 of the Americans with Disabilities Act of 1990 to address this issue. And now when it comes to the most critical part of serving relay users, emergency calls, we are telling those users that they must take extra steps and follow certain rules and conditions to access those critical services. CACDHH believes the proposed process does not meet functional equivalency mandates.

CACDHH believes that a User Registration process only addresses part of the need for location specific information for emergency call handling by only registering users and not actual call origination locations.

We believe that Internet Services Providers have the capability to solve this problem in a more efficient and effective manner than do VRS and IP Relay providers. CACDHH believes that ISPs should be required to do so.